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| APPLICATION NO.                    | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO         |  |
|------------------------------------|------------------------|----------------------|-------------------------|-------------------------|--|
| 10/052,593                         | 01/18/2002             | Robert A. Aekins     | 695695.0087             | 3009                    |  |
| 21832                              | 7590 04/16/2003        |                      |                         |                         |  |
| CUMMINGS AND LOCKWOOD              |                        |                      | EXAMINER                |                         |  |
| GRANITE SQUARE<br>700 STATE STREET |                        |                      | PATEL, TULSIDAS C       |                         |  |
| P O BOX 190<br>NEW HAVE            | 60<br>N. CT 06509-1960 | •                    | ART UNIT                | PAPER NUMBER            |  |
| TVE W TEXT                         | 11, 01 00000 1000      |                      | 2839                    |                         |  |
|                                    |                        |                      | DATE MAILED: 04/16/2003 | DATE MAILED: 04/16/2003 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  |   |  | /           |  |  |  |  |
|---|--|---|--|-------------|--|--|--|--|
| 0   |  | Application No.   | Applicant(s)   | 1           |  |  |  |  |
|   |  | 10/052,593  | AEKINS ET AL.  | 1           |  |  |  |  |
| •   | Office Action Summary  | Examiner  | Art Unit   |             |  |  |  |  |
|   |  | T. C. Patel   | 2839   |             |  |  |  |  |
| Period fo   | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet w   | ith th correspond nce addr   | ess         |  |  |  |  |
| THE - External after of the control | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | within the statutory minimum of thir ill apply and will expire SIX (6) MON cause the application to become AE | reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this common that it is the common that is the common | nunication. |  |  |  |  |
| 1)  | Responsive to communication(s) filed on  | <u> </u>  |  |             |  |  |  |  |
| 2a) <u></u> □   | This action is <b>FINAL</b> . 2b)⊠ Thi   | s action is non-final.  |  |             |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |  |             |  |  |  |  |
| ·   | ion of Claims  |   |  |             |  |  |  |  |
| 4)  | Claim(s) <u>1-18</u> is/are pending in the application<br>4a) Of the above claim(s) is/are withdraw  |   |  |             |  |  |  |  |
| 5)  |  | m nom consideration.  |  |             |  |  |  |  |
| <i>′</i> =  |  |   |  |             |  |  |  |  |
|   |  |   |  |             |  |  |  |  |
|   | Claim(s) are subject to restriction and/or   | election requirement  |  |             |  |  |  |  |
| -   | ion Papers   | oloolion roquilomonic.  |  |             |  |  |  |  |
| 9)  | The specification is objected to by the Examiner   |   |  |             |  |  |  |  |
| 10)   | The drawing(s) filed on is/are: a)□ accep  | ted or b)⊡ objected to <b>by t</b>  | he Examiner.   |             |  |  |  |  |
|   | Applicant may not request that any objection to the  | drawing(s) be held in abeya   | ance. See 37 CFR 1.85(a).  |             |  |  |  |  |
| 11)   | The proposed drawing correction filed on   | is: a) ☐ approved b) ☐ d  | lisapproved by the Examiner.   |             |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |  |   |  |             |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |  |   |  |             |  |  |  |  |
| Priority (  | under 35 U.S.C. §§ 119 and 120   |   |  |             |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |  |   |  |             |  |  |  |  |
| a)  | ☐ All b)☐ Some * c)☐ None of:  |   |  |             |  |  |  |  |
|   | 1. Certified copies of the priority documents  |   |  |             |  |  |  |  |
|   | 2. Certified copies of the priority documents  |   |  | •           |  |  |  |  |
| * (   | <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |  |             |  |  |  |  |
| 14)⊠ A  | ☑ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).   |   |  |             |  |  |  |  |
|   | )  The translation of the foreign language protection  Acknowledgment is made of a claim for domesti   |   |  |             |  |  |  |  |
| Attachmen   | -  |   |  |             |  |  |  |  |
| 2) Notic  | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (PTO-948)<br>nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5.</u>  | 5) Notice of  | Summary (PTO-413) Paper No(s).<br>Informal Patent Application (PTO-1   |             |  |  |  |  |
|   | 1.0%   |   |  |             |  |  |  |  |

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### **DETAILED ACTION**

#### General Status

1. This is a First Action on the Merits. Claims 1-18 are pending in the case.

## Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
  - (e) the invention was described in-
  - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
  - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-16 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Siemon et al. (US 5,459,643).

For claims 1, 6 and 12, Siemon et al. in figures 1-9, discloses a device 100 for reducing electrical noise during the transfer of data signals between media having a plurality of signal carrying elements, wherein capacitive and inductive coupling due to position of elements causes electrical noise in the signal, the device comprising a dielectric support member 102, 108, 116, a means for receiving and transmitting signals 228, 106, a means 218, 220 for using the signals to produce capacitance (figure 4D) for reducing the electrical noise prior to transmitting the signals.

For claim 2, electrically conductive ports 194, 196, 198, 200 are disclosed in figure 4C. For claims 3, 4, 7 and 8, traces 218, 220 and plated through holes are disclosed in close proximity (see figure 4C, column 9, lines 50-67) and also the conductive members are associated with the ports 190-200. For claim 5, printed circuit board 106 is disclosed in figure 4. For claim 6, insulation displacement contacts (IDC) are disclosed in figure 5.

For claims 9-12, the capacitance between the terminals of same polarity is disclosed in figure 4D, same size terminals are disclosed and also the unshielded twisted pair is discussed in column 2, lines 7-10. For claim 12, PCB 106 is disclosed in figure 4. For claims 13-16, capacitive coupling between same polarity of signal pair is disclosed in figure 4D, 8-pin terminals block is disclosed in figure 5. For claim 18, the balancing of signal pairs, by use of capacitance is disclosed in figures 4D and 4E.

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### Allowable Subject Matter

4. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim recites capacitance between various ports, which defines over the art of record.

5. The prior art made of record and not relied upon is considered pertinent to applicant's invention. Siemon et al. (US 5,295,869), Bohbot et al. (US 5,326,284), Aekins (US 6,057,743) and Aekins (US 6,533,618) all disclose capacitive coupling for transmission lines,

Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. C. Patel whose telephone number is (703) 308-1736. The examiner can normally be reached on 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1736.

T. C. Patel

Primary Examiner Art Unit 2839

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tcp

April 12, 2003